

FIG. 1

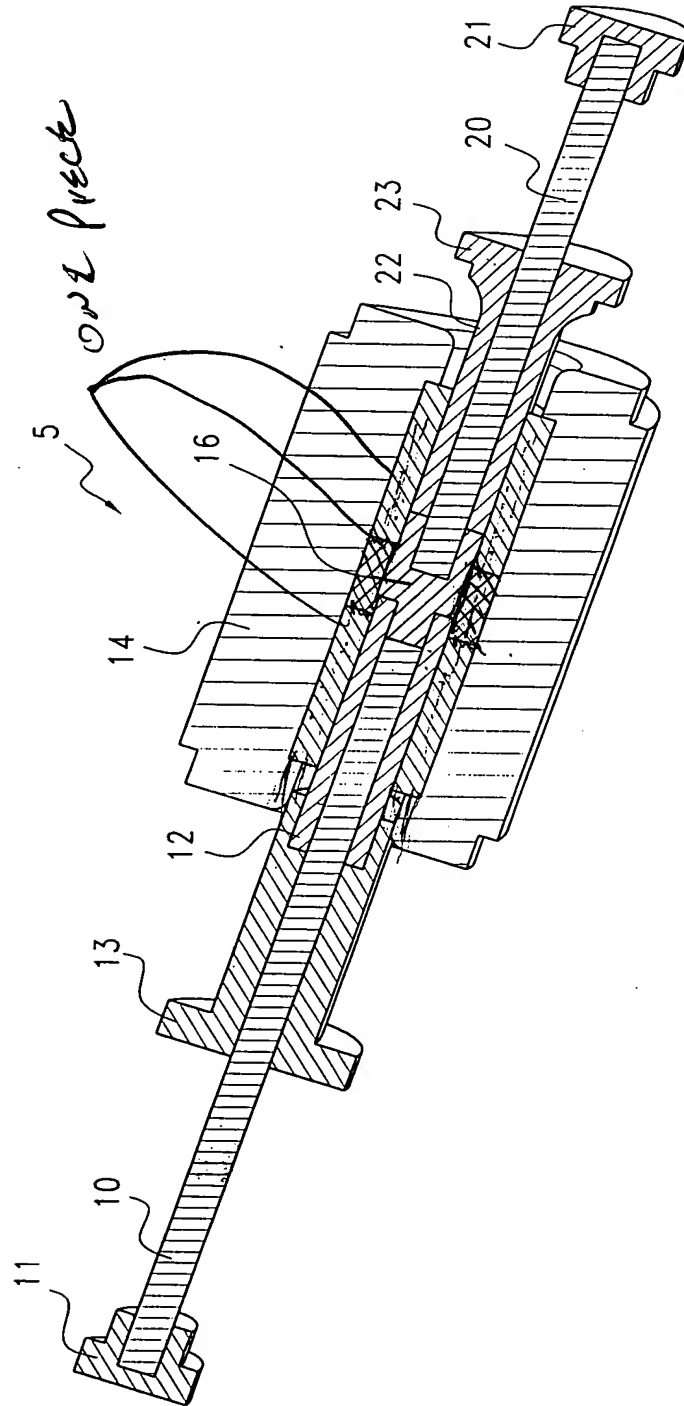


FIG. 2

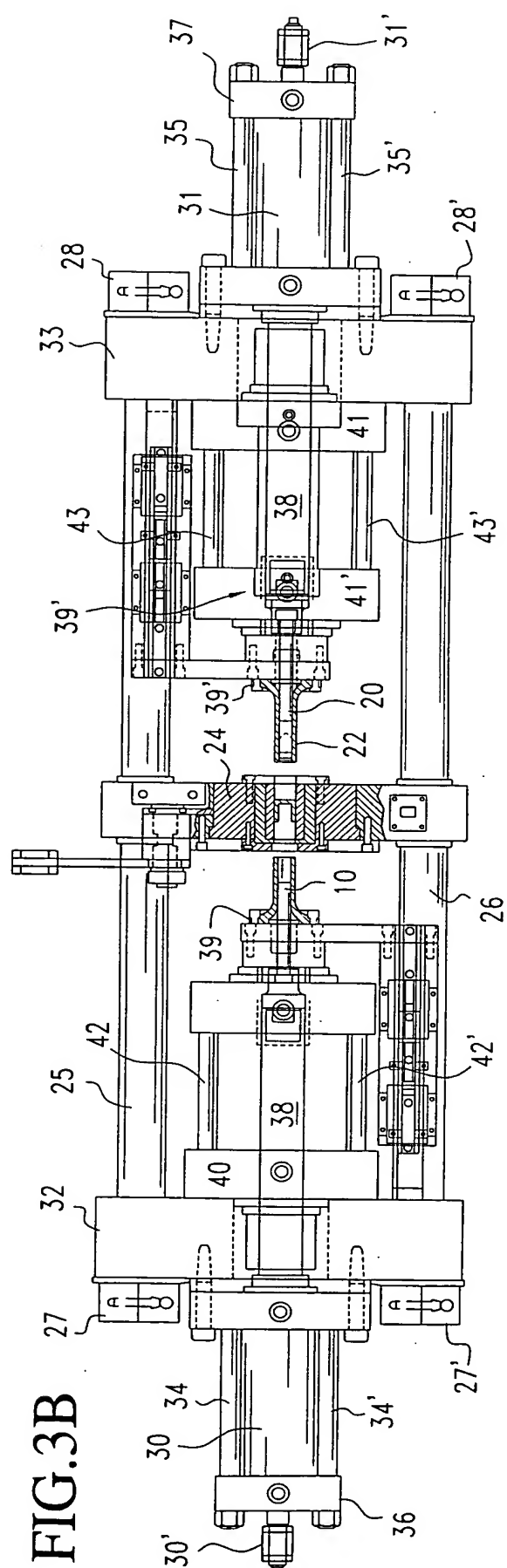
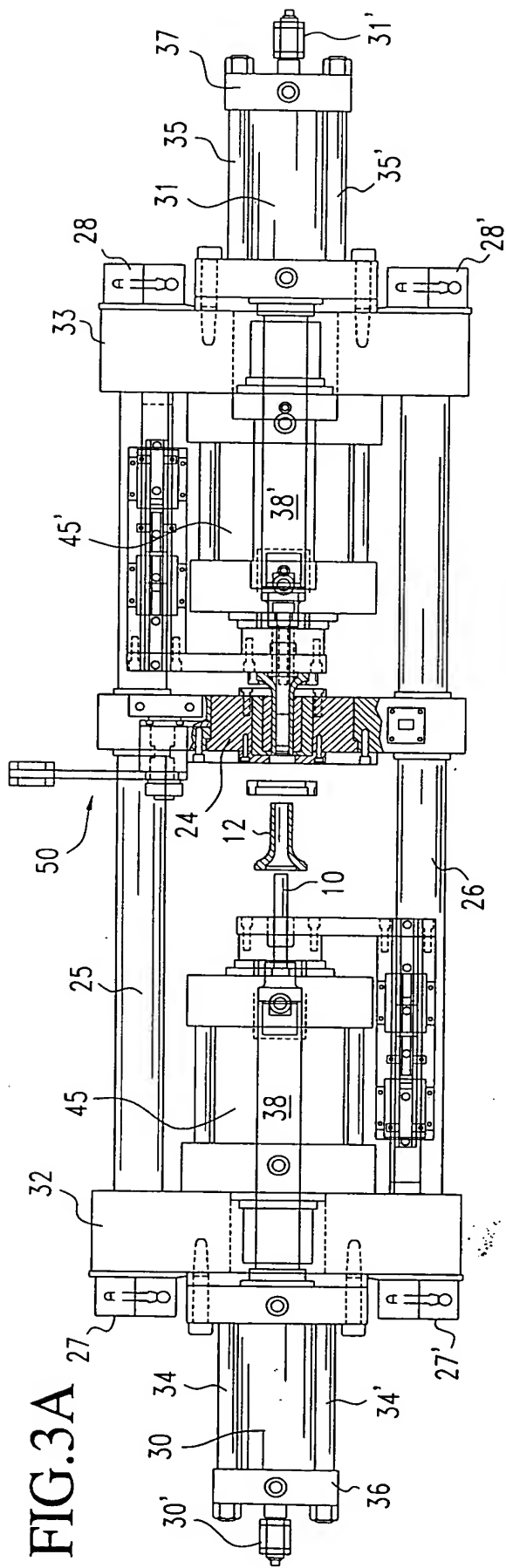


FIG. 4B

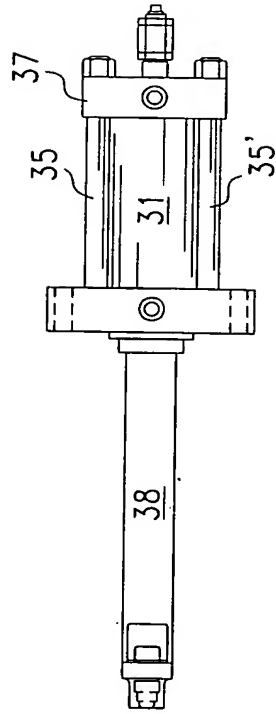


FIG. 4A

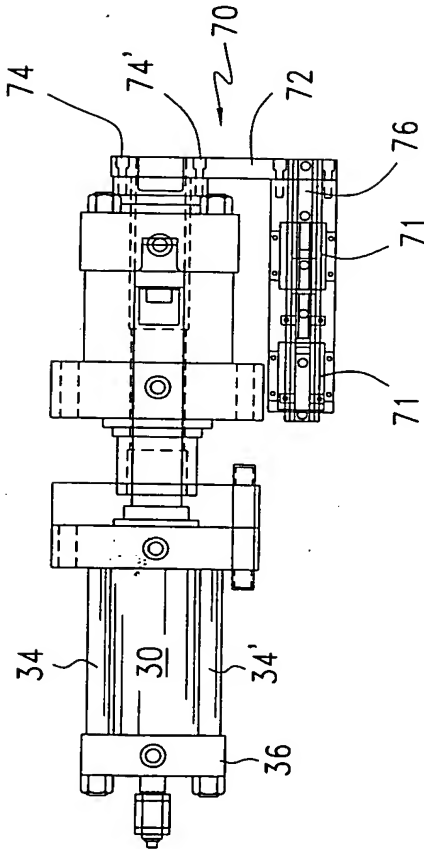


FIG. 5

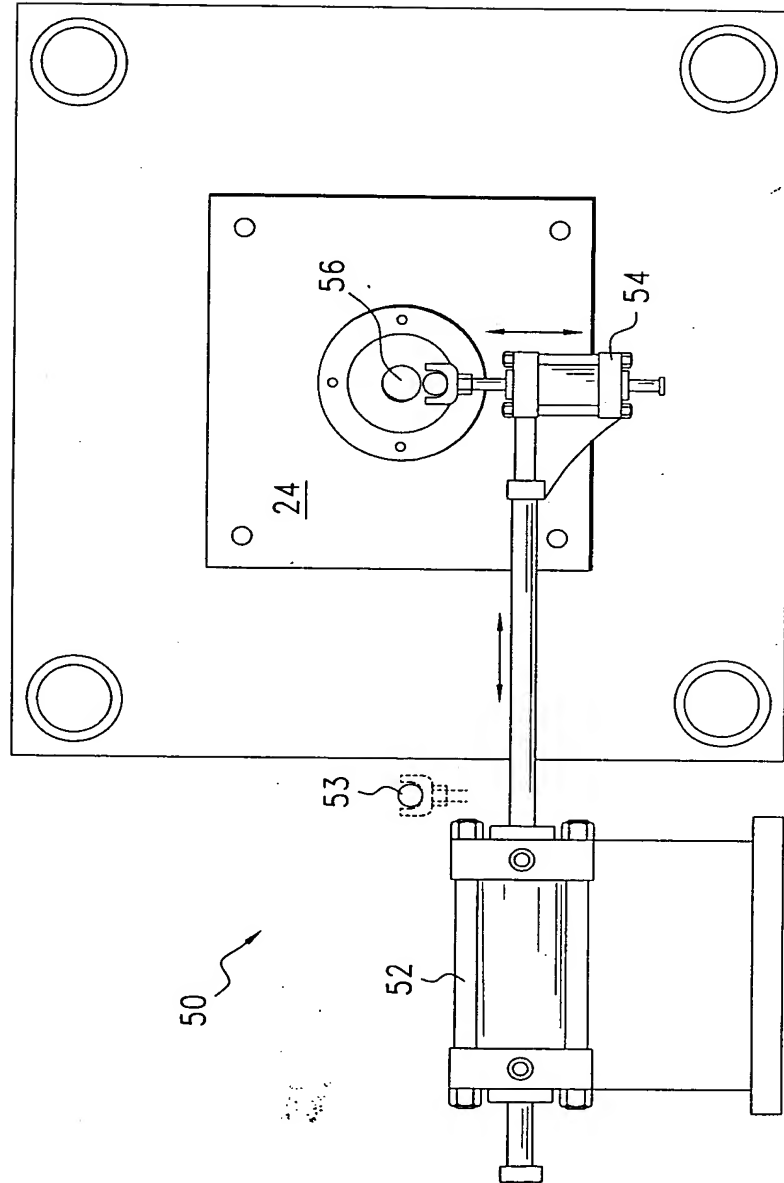
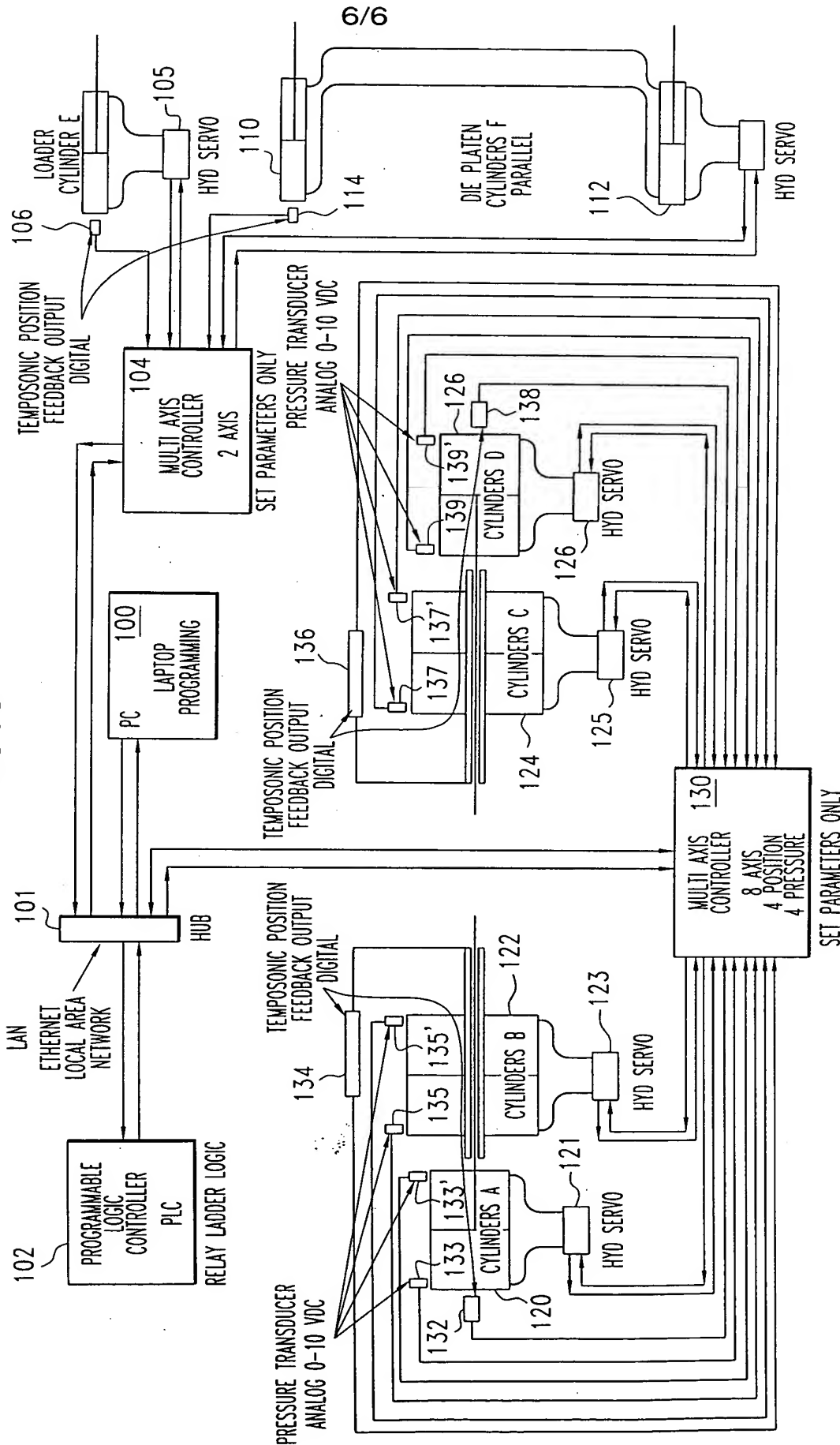
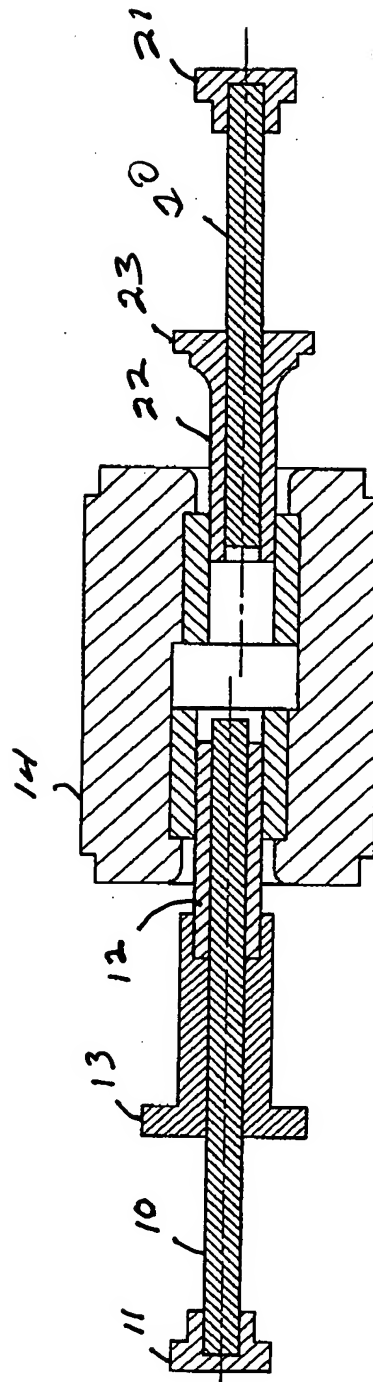


FIG.6

The diagram illustrates a multi-axis control system for a hydraulic press. At the top left, a **PROGRAMMABLE LOGIC CONTROLLER PLC 102** is connected via a **LAN ETHERNET LOCAL AREA NETWORK** to a **HUB 101**. The hub also connects to a **PC LAPTOP PROGRAMMING 100**. Below the hub, a **RELAY LADDER LOGIC** block is shown. The central part of the diagram features three main controller units: a **MULTI AXIS CONTROLLER 2 AXIS 104**, a **MULTI AXIS CONTROLLER 8 AXIS 4 POSITION 4 PRESSURE 130**, and a **MULTI AXIS CONTROLLER 6/6 110**. These controllers are interconnected with various hydraulic cylinders and servos. Cylinders A, B, C, D, E, and F are shown, each associated with a **HYD SERVO** and a **TEMPSONIC POSITION FEEDBACK OUTPUT DIGITAL** signal. Pressure transducers (132, 137, 139) provide **PRESSURE TRANSDUCER ANALOG 0-10 VDC** signals to the controllers. The bottom section shows a detailed view of the hydraulic press mechanism, including the **DIE PLATEN CYLINDERS PARALLEL 112** and the **LOADER CYLINDER E 106**.





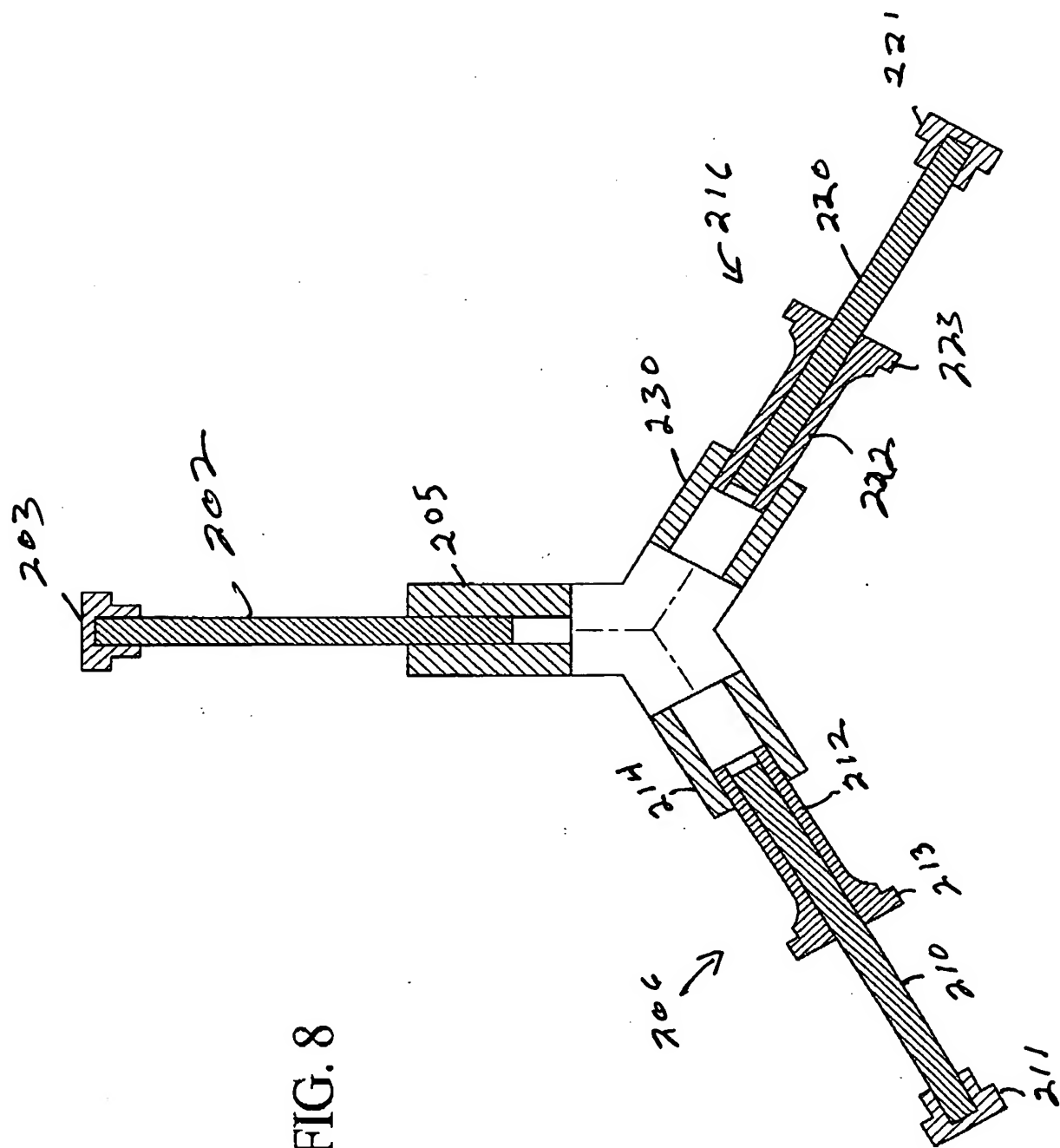


FIG. 8